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Alex A. Kipman

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EXAMINER

WEI, ZHENG

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/802,239	Applicant(s) KIPMAN ET AL.	
	Examiner ZHENG WEI	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8-16,18-20 and 22-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8-16,18-20 and 22-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. This office action is in response to the amendment filed on 10/29/2009.
2. Claims 20 and 22-31 have been amended.
3. Claims 1, 3-6, 8-16, 18-20 and 22-35 remain pending and have been examined.

Response to Arguments

4. Applicant's arguments filed on 10/29/2009, in particular on pages 9-11, have been fully considered but they are not persuasive. For example:
 - At page 10, first paragraph, Applicants submit that the Cymerman's Ant is not a build process which is construed to encompass compiling, linking, and the like. However, Examiner respectfully disagrees. Cymerman's page 1, section "Why do I need a defined build process", discloses a definition about defined build process and at next section "What is Ant?" clearly discloses that "Ant is a platform-independent scripting tool that lets you construct your build scripts in much the same fashion as the 'make' tool in C or C++". It can be seen that Ant tools is the same as "make" tool when executed will perform or realize the steps of the build process and generated final software build. In the same section, Cymerman also discloses a table that contains example commands which are used by Ant to compile and control source code, e.g. "CVS", "Javac" (p.2, table, "Javac", "Compiles a source tree within the running (Ant) VM"). Moreover, at page 3, section "OK, show me how this works", Cymerman

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further gives out an example how to use Ant to running build process including steps of create directories for source code and target code, invoking Javac compiler to compile source code (see for example, p.3 "Simple build process with Ant (simple.xml)"). Therefore, Ant tools to execute and realize the build process including compilation.

- At page 10, second paragraph, Applicants submit that Jerger does not describe accessing a policy to apply a permission level to the build process. However, Examiner's position is that Cymerman discloses compilation policy which selectively includes or excludes certain entities matching the pattern in the name attribute or a certain property is set to true or false in the build process (see for example, p.5-6, "include", "exclude" and "unless" and related text). Jerger discloses a configuration model which contains configurable permission (see for example, fig.8, fig.13A-C and related text). Both Cymerman and Jerger use the configurable properties (e.g. true, or permissions) to control access files. Therefore, it would have been obvious to one having ordinary skill in the art to use Jerger's permissions policy in Cymerman's access control mechanism to select include or exclude certain files to be involved in the compile or build process when running Ant tool.
- At page 11, second paragraph, applicants submit that neither reference discloses or suggests the limitation about "at build time, principal permission level under which the build process executes is determined by analyzing the levels of trust associated with each of the build entities, an lowest level of trust

of all involved build entities dictates the principle permission level for execution of the build process". However, Examiner's position is that the three levels of trust including "trusted", "semi-trusted" and "untrusted" wherein if the lowest level is "trusted", it is the same as Ant build process without any include or exclude restrictions; if the lowest level is "semi-trusted", it is equivalent to the build process with include or exclude restrictions and if the lowest level is "untrusted", file will be excluded and will cause build fail. Therefore, Cymerman and Jerge together disclose such build process which includes those dictated permission level by using Ant tool and Jerger's policy components as recited in claim 1.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-6, 8-16, 18-20 and 22-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cynerman (Michael Cynerman, Automate your build process using Java and Ant) in view of Jerger (US 6,321,334).

Claim 1:

Cynerman discloses a system that facilitates management of a build process, comprising:

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- a build process that processes one or more build entities (see for example, p.1, section Introducing the powerful XML-based scripting tool, Ant. “A defined build process” and related description); and
- a policy component that is processed by the build process within which the build process operates (see for example, p.3, example of simple.xml file includes build policy/rules for build process)

Cynerman also discloses using “include/exclude” and “unless” entities to match the pattern in the name attribute from the compilation (see for example, p.6, first and second paragraphs). But Cynerman does not explicitly disclose determining one or more levels of trust within which the build process operates.

However, Jerger in the same analogous art of computer-based system discloses a method of configuration of a system security policy that is stored on a host computer, (see for example, Figure 8, items 812 Unsigned Permissions, 814 Trusted Signed Permissions, 816 Untrusted Signed Permissions and related text). wherein the one or more build entities are each associated with one or more levels of trust, such that at build time, a principal permission level under which the build process executes is determined by analyzing the levels of trust associated with each of the build entities, and lowest level of trust of all involved build entities dictates the principal permission level for execution of the build process (see for example, Fig.13A-C, step 1312, “Is class digitally signed?”, step 1324 “Fail”, step 1334, “Compare Requested permission set to granted permission set”, step 1338, 1318 “Grant requested Permissions”, “Store any

Granted Permissions with the Class”). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to define those different levels of trust for the build entities and use Cynerman’s “unless” entities to match the pattern in the name attribute about the levels of trust from the compilation. One would have been motivated to do so to secure the build process by automatically administering the decision to grant or deny permissions to specific build entities as suggested by Jerger (see for example, col.2, lines 27-51).

Jerger further discloses the levels of trust include levels that are representative of trusted, which has no restrictions to the build process (see for example, Fig.13A-C, steps 1312->1320->1336-1318 and related text), semi-trusted, which has restrictions to the build process (see for example, Fig.13A-C, steps 1312->1314->1316 and related text; also see Fig.12C, item 1230i and 1232i and related text), and untrusted, which causes the build process to fail. (see for example, Figure 13A-C, steps 1322->1324, “Fail” and related text).

Cynerman also discloses a BuildListener interface which can listen, catch and notify when certain steps in the build process (see for example, p.7, section Reporting enhancement, “If you wanted to extend Ant’s functionality to provide notification when certain steps in the build process are completed or are in progress...”; “BuildListener” and related text). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to notify developer any events including the event wherein if the lowest level of

trust is untrusted and the build process fails as suggested by Cynerman

Claim 3:

Cynerman and Jerger disclose the system of claim 1, Cynerman further discloses the policy component includes one or more policy files that are processed by the build process (see for example, p.3, example of simple.xml file includes build policy/rules for build process).

Claim 4:

Cynerman and Jerger disclose the system of claim 1, Cynerman further discloses the policy component includes one or more policy files that are processed by the build process before the one or more build entities are built (see for example, p.3, example of simple.xml file includes build policy/rules for build process).

Claim 5:

Cynerman and Jerger disclose the system of claim 1, Cynerman further discloses the one or more entities include at least one of a project, a task, a logger, and operating system (OS) account information (see for example, p.3, example of simple.xml file includes project; also see example command line, p.7, XmlLogger for writing a reporting tool).

Claim 6:

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Cynerman and Jerger disclose the system of claim 1, Jerger further discloses at least one of the one or more build entities are each associated with the one or more of the levels of trust, which associations are defined in the policy component via at least one of a user-definable policy file and a default policy file, at least one or both of which are processed to determine the level of trust for the build process (see for example, Figure 4A, set the security level for this zone, items 408-412 and related text; also see col.18, lines 51-63, "each security zone has a default security level, which is used if not changed by a user").

Claim 8:

Cynerman and Jerger disclose the system of claim 1, Cynerman also discloses a computer that employs the system of claim 1 (see for example, p.3, lines 3-4, NT machine).

Claim 9:

Cynerman and Jerger disclose the system of claim 1, Cynerman also discloses a server that employs the system of claim 1 (see for example, p.3, line 3, server's operating system).

Claim 10:

Cynerman and Jerger disclose the system of claim 1, Cynerman also discloses the system of claim 1, the entity is received at least by one of downloading from a

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website, as part of an e-mail, and a version control system (see for example, p.2, line 1, CVS- Handles package/modules retrieved from a CVS repository).

Claim 11-15:

Claims 11-15 are another system version of claims 1-6 and 8-10 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Thus, they also would have been obvious.

Claim 16:

Cynerman and Jerger disclose the system of claim 11, Jerger further discloses an option for setting custom permission level (see for example, Figure 8, item 816 and 824, "Refuse untrusted permission without asking" and related text).

Therefore, it would have been obvious that the build process would exclude and not build those entities when the permission level is representative of untrusted.

Claim 18:

Cynerman and Jerger disclose the system of claim 11, Cynerman further discloses the one or more policy files are written in XML (see for example, p.3, example of simple.xml file includes build policy/rules for build process)

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Claim 19:

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Cynerman and Jerger disclose the system of claim 11, Cynerman further discloses the one or more policy files are adjusted automatically according to one or more parameters (see for example, p.3, bottom line – p.4, line 7 the example of Ant command line parameter, e.g. “init” and related text).

Claim 20:

Claim 20 is computer program product version of the claimed method, wherein all claimed limitation functions have been addressed in claims 1-6 and 8-10 above respectively. It is well known in the computer art that such method steps can be implemented as computer program and can be practiced and /or stored on a computer operable media. Thus, they also would have been obvious in view of reference teachings above.

Claim 22:

Cynerman and Jerger disclose the system of claim 20, Cynerman further discloses the method of claim 20, further comprising sending a message when the build process fails (see for example, p.7, section “Reporting enhancements”, BuildEvent, “public Throwable getException()” and related text).

Claim 23:

Cynerman and Jerger disclose the system of claim 20, Jerger further discloses, providing a level of trust that allows any operation to be performed during the act

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of performing (see for example, Figure 8, item 816, “Untrusted Signed Permissions”, item 826, “Apply to all permissions not specifically allowed” and related text)

Claim 24:

Cynerman and Jerger disclose the system of claim 20, Jerger further discloses providing a level of trust that allows only a minimal set of operations to be performed during the act of performing (see for example, Figure 8, item 816 and 824, “Refuse untrusted permission without asking” and related text. Therefore, only trusted permission allows.).

Claim 25;

Cynerman and Jerger disclose the system of claim 20, Jerger further discloses providing a level of trust that aborts the build process during the act of performing (see for example, Figure 4A, “Set the security level for the zone”, item 408 “High, exclude content that could damage your computer”)..

Claim 26:

Cynerman and Jerger disclose the system of claim 20, Jerger further discloses, the act of associating associates one of the one or more build entities with at least two levels of trust (see for example, Figure 9A, 9C and related text; For setting different Read Access type and Connect Access type).

Claim 27:

Cynerman and Jerger disclose the system of claim 20, Jerger further discloses providing a default set of associations between the one or more build entities and one or more levels of trust in the form of a file (see for example, Figure 8, “Edit Custom Permissions”, “Save” button can be used to save configuration to file)

Claim 28:

Cynerman and Jerger disclose the system of claim 20, Jerger further discloses, the level of trust is defined according to at least one of user-defined policy data and default policy data (see for example, Figure 4A, default: High, Medium and Low; User defined: Custom).

Claim 29:

Cynerman and Jerger disclose the system of claim 20, Jerger further discloses, the user-defined policy data overrides the default data where a conflict occurs (see for example, col.18, lines 51-63, “each security zone has a default security level, which is used if not changed by a user”).

Claim 30:

Cynerman and Jerger disclose the system of claim 20, Cynerman further discloses, storing the association of the build entity with the level of trust in the

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form of a file to which access is restricted (see for example, p.3, example of simple.xml file includes build policy/rules for build process; also see p.6, first and second paragraphs, “include/exclude” and related text).

Claim 31:

Cynerman and Jerger disclose the system of claim 20, Cynerman further discloses, storing the association of the build entity with the level of trust in the form of a file that further relates the use of system resources with the level of trust (see for example, p.6, third paragraph about setting “available” property for using class “com.ibm.bsf.BSFManager”).

Claim 32-35:

Claims 32-35 are another system version of claims 1-6 and 8-10 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above. Thus, they also would have been obvious.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
8. Applicant's arguments with respect to claims rejection have been considered but are not persuasive. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zheng Wei whose telephone number is (571) 270-1059 and Fax number is (571) 270-2059. The examiner can normally be reached on Monday-Thursday 8:00-15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571- 272-1000.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. W./
Examiner, Art Unit 2192

/Tuan Q. Dam/
Supervisory Patent Examiner, Art Unit 2192